



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

S073218

D2282-5

Job Sheet 176347



Part No: D2282-5

Job Qty: 60 ea

Part Name: Tube



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/20/18

Job Tracking No:

Due Date: 5/11/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV E IPP Rev:A Removed from 9 Digit 05-12-02 JLM IPPRev:B Now on Doosan Lathe 08-06-05 JLM
Verified By:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	60 Ea		5/11/18	0.00	0.00	Start Up Machining		M.P. 12/05/22
100	Doosan	60 pcs		5/11/18	0.03	9.33	Doosan		M.P. 12/05/22
120	QC	60 pcs		5/11/18	0.00	0.00	QC8		M.P. 12/05/22
130	Packaging	60 pcs		5/11/18	0.00	0.00	Packaging3		JBL 12-05-22
140	QC21-SA	60 Ea		5/11/18	0.00	0.00	QC21		DAS 21 9-20

Part Op 100 - 1-Turn as per Dwg D2282 and Folio FA189

Descriptions: 130 - *****STOCK IN LARGE FAB*****

MAY 23 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304RO.750	304 SS Roundbar .750	10.8036 ft (.18006 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M304RO.750	11	61	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Handle Tube	2.170Inches $\pm$ 0.030	2.200 2.140		
2	Handle Tube	0.063Inches $\pm$ 0.010	0.073 0.053	Radius	
3	Handle Tube	0.063Inches $\pm$ 0.010	0.073 0.053		
4	Handle Tube	0.125Inches $\pm$ 0.010	0.135 0.115		
5	Handle Tube	0.090Inches $\pm$ 0.010	0.100 0.080		
6	Handle Tube	45.000Degrees $\pm$ 0.000	45.000 45.000	Angle	
7	Handle Tube	0.350Inches $\pm$ 0.010 - 0.000	0.360 0.350	Radius	



DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Water Jet ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☐																																																																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																	
Description Work Order Deviation		Disposition																																																																			
Root Cause <table style="width:100%;"><tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr><tr><td>Design ☐</td><td>Operator ☐</td></tr><tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr><tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr><tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr><tr><td>Material ☐</td><td>Use for Testing ☐</td></tr><tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr><tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr><tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr><tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr><tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr><tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr></table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%;"><tr><td>☐ Pressure/Forced</td><td>☐ Temperature/Cure</td><td>☐ Power Loss/Surge</td><td>☐ Positioned Wrong</td></tr><tr><td>☐ Bending</td><td>☐ Set-up</td><td>☐ Folio/Program</td><td>☐ Outside Dimensions</td></tr><tr><td>☐ Centre Not Concentric</td><td>☐ BOM/Route</td><td>☐ Grain</td><td>☐ Over/Under tolerance</td></tr><tr><td>☐ Cracks</td><td>☐ Broken/Damage/Defect</td><td>☐ Weld</td><td>☐ Part Incorrect</td></tr><tr><td>☐ Crimp/Kink/Ripple/Wave</td><td>☐ Inspection Incomplete/Unqualified</td><td>☐ Wrong Stock Pulled</td><td>☐ Part Lost/Missing</td></tr><tr><td>☐ Cuffs</td><td>☐ Contamination</td><td>☐ Out of Sequence</td><td>☐ Part Moved</td></tr><tr><td>☐ Crushing</td><td>☐ Countersink</td><td>☐ Off-set</td><td>☐ Drawing</td></tr><tr><td>☐ Heat Treat</td><td>☐ Cut Too Short</td><td>☐ Mislabeled</td><td>☐ Finish</td></tr><tr><td>☐ Wave/Twist in Tube</td><td>☐ Instructions Incomplete/Unclear</td><td>☐ Fit/Function</td><td>☐ Misread</td></tr><tr><td>☐ Marks/Chatter</td><td>☐ Drill Holes</td><td>☐ Misaligned/off center</td><td>☐ Turning Sequence</td></tr></table>				☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence
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8	Handle Tube	0.158Inches $\pm$ 0.010	0.160	0.168 0.148	
9	Handle Tube	0.386Inches + 0.005 - 0.000	0.390	0.391 0.386	Diameter
10	Handle Tube	0.700Inches $\pm$ 0.010	0.698	0.710 0.690	Diameter

Plex 5/1/18 8:20 AM Dart.lajeunesse.marie

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS							
	Rework	☐	Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
	Scrap	☐	Machining	☐	Small Fab	☐	Prod. Eng. Coord.	☐	Quality	☐
	Use-as-is	☐	Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
	Suspected Unapproved	☐	Large Fab	☐	Composite	☐	Supplier	☐		

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval
Description Work Order Deviation		Disposition	Completed By
			Lead hand / Supervisor Approval Verification
			QC / QA Coordinator Approval

FAULT CATEGORY

Cure	☐	Power Loss/Surge	☐	Positioned Wrong
	☐	Folio/Program	☐	Outside Dimensions
	☐	Grain	☐	Over/Under tolerance
ge/Defect	☐	Weld	☐	Part Incorrect
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omplete/Unclear	☐	Fit/Function	☐	Misread
	☐	Misaligned/off center	☐	Turning Sequence

Date: 05/22/18

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CANADA
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www.dartaerospace.com

Container No: S073219
Part: D2282-5
Job No: 176347
Serial No/Batch: S073219
Revision:
Inspector:

